

Guy Norman
Chair
Washington

Patrick Oshie
Washington

Chuck Sams
Oregon

Ginny Burdick
Oregon



Northwest **Power** and **Conservation** Council

Jim Yost
Idaho

Jeffery C. Allen
Idaho

Doug Grob
Montana

Mike Milburn
Montana

November 9, 2021

DECISION MEMORANDUM

TO: Council members

FROM: Kevin Smit, Senior Analyst
Andrea Goodwin, Senior Counsel

SUBJECT: Council Comments to the U.S. Department of Energy

PROPOSED ACTION: Approve Council comments to the U.S. Department of Energy in support of its Supplemental Notice of Proposed Rulemaking (SNOPR) to establish manufactured housing energy efficiency standards.

SIGNIFICANCE: Federal standards has been a key delivery mechanism for cost-effective energy savings in the Northwest and an important (and low cost) component in meeting efficiency goals. The proposed standards would improve the energy efficiency of all new manufactured homes.

BUDGETARY/ECONOMIC IMPACTS

None.

BACKGROUND AND ANALYSIS

This proposed rulemaking has been a longtime coming. The Department of Housing and Urban Development (HUD) traditionally regulates the manufactured housing industry, and the HUD Code includes requirements related to energy efficiency for manufactured homes, however, these requirements have not been updated in more than 25 years. For comparison, state building codes for single family and multifamily homes are updated about every three to five years. In addition, the Energy Independence and Security Act of 2007 (EISA) provides the U.S. Department of Energy (DOE) with the authority to regulate energy conservation in manufactured housing. Specifically, EISA directs DOE to establish energy conservation standards for

manufactured housing and to do so in consultation with HUD. However, DOE has yet to promulgate any standards.

The manufactured housing industry is important to the Northwest with over 580,000 in the current stock and about 4000 units shipped in the NW each year. It is especially important for rural communities and lower income families. According to a [2020 report](#) by the American Council for an Energy Efficient Economy, nationally, the median income of manufactured home residents is approximately \$35,000 per year and the median energy burden is 5.3 percent (energy bill as a percent of income).

The Council has long supported the development of codes and standards for improved energy efficiency in manufactured homes. The First Power Plan (1983) included an action item for BPA to work with HUD to update their efficiency standards for manufactured housing. During the 1980s and 1990s programs like the Manufactured Housing Acquisition Program (MAP) were developed by Bonneville and supported by the Council. These programs provided incentives first to homeowners and then directly to manufacturers to build the homes to higher levels of energy efficiency than were required by the national HUD Code. The requirements typically included 2 x 6 walls, double pane windows, duct sealing, and other efficiency measures. In addition, data from the MAP program demonstrated that manufactured homes could be built more efficiently, and these cost and performance data were used by both HUD and DOE (PNNL) in their cost-effectiveness analysis when the HUD Code EE standards were last updated in 1994.

While there have been several efforts since 1994 to update the manufactured home energy standards, including through an HUD/Industry consensus committee process and a Congressionally established National Commission on Manufactured Housing both of which Council staff participated, no code changes have resulted; and, not much happened until 2007 when Congress passed the Energy Independence and Security Act of 2007 (EISA). Among other things, EISA directs DOE to establish energy conservation standards for manufactured housing, and between 2008 and 2012 Council staff met several times with DOE staff to provide data and analysis from the 5th and 6th Power Plans to support standard development. A draft standard was eventually issued in 2016, however, this standard was never finalized.

In the meantime, the northwest EE utility-run programs continued, as the program EE provisions were better than the HUD code requirements. Currently, the region has the Northwest Energy-Efficient Manufactured Housing Program™ (NEEM) program (<https://www.neemhomes.com/>). The NEEM program promotes and certifies homes that qualify for the ENERGY STAR rating. Many utilities in the region offer incentives to homeowners and/or manufacturers for NEEM certified manufactured home. There is also a second tier called the ENERGY STAR with NEEM+ package which goes above and beyond the base ENERGY STAR standard.

Nonetheless, a federal standard remains due under EISA, and after a legal challenge for failing to promulgate standards within the statute's prescribed timelines, DOE has now issued this supplemental notice of proposed rulemaking to establish energy conservation standards for manufactured housing. As detailed in the SNOPR, DOE

proposes updated standards based on the 2021 version of the International Energy Conservation Code (IECC)¹. As proposed, the standards would establish new requirements for manufactured homes that relate to the building thermal envelope; air sealing; installation of insulation; duct sealing; heating, ventilation and air conditioning; service hot water systems; mechanical ventilation fan efficacy; and heating and cooling equipment sizing. Further, it includes two potential approaches: one a tiered approach based on the cost of the home (\$55,000 or less would have less stringent standards), and an alternative approach that would apply the same standards to all manufactured homes. DOE has tentatively concluded that the energy conservation standards under either option are cost-effective.

Council staff prepared and circulated a draft comment letter to the Council for review. The comments are broadly supportive of the proposal, especially the non-tiered approach, and express an urgency in completing a long-overdue standard update for manufactured homes. DOE is accepting comments on this supplemental rulemaking and an associated notice of data availability until November 26, 2021.

ALTERNATIVES

In the alternative to approving the draft comments as circulated, members could revise the comments or decide to not submit comments at this time.

¹ Note that both Idaho and Montana currently reference earlier versions of the IECC for their site-built homes. Washington and Oregon have their own, more stringent codes.